

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A set of nucleic acids comprising:

a first nucleic acid containing SEQ ID NO:1 or 3, and

a second nucleic acid containing SEQ ID NO:2 or 4,

wherein the first and second nucleic acids are ~~each 18- no shorter than 18 nucleotides and no longer than 40 nucleotides~~ in length and, participate in a polymerase chain reaction, with an Escherichia coli nucleic acid as a template, to generate a nucleic acid ~~containing Escherichia coli open reading frame ECs3459 that specifically hybridizes under highly stringent conditions to SEQ ID NO: 5, 6, 7, or 8, or the complement thereof.~~

2. (Original) The set of nucleic acids of claim 1, wherein the first nucleic acid contains SEQ ID NO:1 and the second nucleic acid contains SEQ ID NO:2.

3. (Previously presented) The set of nucleic acids of claim 2, wherein the first and second nucleic acids are each 18-30 nucleotides in length.

4. (Original) The set of nucleic acids of claim 3, wherein the first nucleic acid is SEQ ID NO:1 and the second nucleic acid is SEQ ID NO:2.

5. (Original) The set of nucleic acids of claim 1, wherein the first nucleic acid contains SEQ ID NO:3 and the second nucleic acid contains SEQ ID NO:4.

6. (Previously presented) The set of nucleic acids of claim 5, wherein the first and second nucleic acids are each 24-32 nucleotides in length.

7. (Original) The set of nucleic acids of claim 6, wherein the first nucleic acid is SEQ ID NO:3 and the second nucleic acid is SEQ ID NO:4.

8. (Currently amended) A nucleic acid obtained from amplification of an *Escherichia coli* nucleic acid template with an upstream primer containing SEQ ID NO:1 or 3 and a downstream primer containing SEQ ID NO:2 or 4, wherein each primer is [[18-]] no shorter than 18 nucleotides and no longer than 40 nucleotides in length and the amplified nucleic acid contains *Escherichia coli* open reading frame ECs3459 specifically hybridizes under highly stringent conditions to SEQ ID NO: 5, 6, 7, or 8, or the complement thereof.

9. (Original) The nucleic acid of claim 8, wherein the upstream primer contains SEQ ID NO:1 and the downstream primer contains SEQ ID NO:2.

10. (Original) The nucleic acid of claim 9, wherein each primer is 18-30 nucleotides in length.

11. (Original) The nucleic acid of claim 10, wherein the upstream primer is SEQ ID NO:1 and the downstream primer is SEQ ID NO:2.

12. (Original) The nucleic acid of claim 8, wherein the upstream primer contains SEQ ID NO:3 and the downstream primer contains SEQ ID NO:4.

13. (Original) The nucleic acid of claim 12, wherein each primer is 24-32 nucleotides in length.

14. (Original) The nucleic acid of claim 13, wherein the upstream primer is SEQ ID NO:3 and the downstream primer is SEQ ID NO:4.

15. (Currently amended) A nucleic acid selected from the group consisting of SEQ ID NOs:5-8 and ~~sequences complementary the complete complements~~ thereto.

16-22. (Cancelled).

23. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:5.

24. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:6.

25. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:7.

26. (Original) The nucleic acid of claim 15, wherein said nucleic acid is SEQ ID NO:8.

27. (Withdrawn) A method of detecting *Escherichia coli*, comprising:
providing a sample having a nucleic acid from an unknown microorganism;
amplifying the nucleic acid with an upstream primer containing SEQ ID NO:1 or 3 and a downstream primer containing SEQ ID NO:2 or 4, each primer being 18-40 nucleotides in length; and

detecting an amplification product;
whereby detection of the amplification product indicates the presence of *Escherichia coli*.

28. (Withdrawn) The method of claim 27, wherein the upstream primer contains SEQ ID NO:1 and the downstream primer contains SEQ ID NO:2.

29. (Withdrawn) The method of claim 28, wherein each primer is 18-30 nucleotides in length.

30. (Withdrawn) The method of claim 29, wherein the detecting step includes hybridizing the amplification product to a nucleic acid probe that is 26-1000 nucleotides in length and contains a sequence selected from the group consisting of SEQ ID NOs:5-8, or a sequence complementary thereto.

31. (Withdrawn) The method of claim 30, wherein said nucleic acid probe is 26-50 nucleotides in length.

32. (Withdrawn) The method of claim 27, wherein the upstream primer contains SEQ ID NO:3 and the downstream primer contains SEQ ID NO:4.

33. (Withdrawn) The method of claim 32, wherein each primer is 24-32 nucleotides in length.

34. (Withdrawn) The method of claim 33, wherein the detecting step includes hybridizing the amplification product to a nucleic acid probe that is 26-1000 nucleotides in length and contains a sequence selected from the group consisting of SEQ ID NOs:5-8, or a sequence complementary thereto.

35. (Withdrawn) The method of claim 34, wherein said nucleic acid probe is 26-50 nucleotides in length.

36. (Currently amended) The set of nucleic acid of claim 1, further comprising a third nucleic acid that is [[26-]] no shorter than 26 nucleotides and no longer than 1000 nucleotides in length and contains a sequence selected from the group consisting of SEQ ID NOs:5-8, and sequences complementary thereto, wherein the third nucleic acid specifically hybridizes under highly stringent conditions to SEQ ID NO: 5, 6, 7, or 8, or the complete complement thereof.

37. (Currently amended) The nucleic acid of claim 36, wherein the third nucleic acid is [[26-]] at most 500 nucleotides in length.

38. (Currently amended) The nucleic acid of claim 37, wherein the third nucleic acid is [[26-]] at most 200 nucleotides in length.

39. (Currently amended) The nucleic acid of claim 38, wherein the third nucleic acid is [[26-]] at most 50 nucleotides in length.

40. (Previously presented) The nucleic acid of claim 39, wherein the third nucleic acid is SEQ ID NO:5.

41. (Previously presented) The nucleic acid of claim 39, wherein the third nucleic acid is SEQ ID NO:6.

42. (Previously presented) The nucleic acid of claim 39, wherein the third nucleic acid is SEQ ID NO:7.

43. (Previously presented) The nucleic acid of claim 39, wherein the third nucleic acid is SEQ ID NO:8.